

CONFIDENTIAL

NPIC/P&DS-41/65
4 February 1965

MEMORANDUM FOR: Chief, Procurement Division, OL

ATTENTION:

THROUGH: Chief, Support Staff, NPIC

SUBJECT: Potential Contractors for Development of a
Motorized Film Rewind Unit.

The following is a list of potential contractors that are most qualified to develop a motorized film rewind unit as outlined in the enclosed Development Objectives. It is requested that two copies of these objectives be forwarded to each contractor along with a request for proposal.

Enclosures (26)

Distribution:

- Orig & 1 - Addressee
- 2 - P&DS/DB
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5 February 1965

DEVELOPMENT OBJECTIVES

MOTORIZED FILM REWIND UNIT

1. Introduction

This objective outlines the requirements to be met in the development of a motorized film-rewind unit. A motorized unit is needed because of the tremendous quantities of film that must be transferred from one spool to another in specialized, volume handling of film.

2. Concept

2.1 Purpose: A motorized film-rewind unit needs to be developed which will speed up the film rewinding operation with large volumes of film, thereby saving time and reducing operator effort and fatigue.

2.2 Scope: The results of this project will be the development of a prototype, motorized, film-rewind unit which can be used under operational conditions.

2.3 Philosophy: Present film-rewind units are hand-operated. The proposed development will offer a straightforward improvement over current equipment: it would afford increased efficiency by speeding up rewind operations and freeing the operator for other tasks.

3. Requirements

3.1 The rewind-unit should be designed to have continuously variable motor speeds from 0 to 1000 RPM, but the speed must not vary, once set, during transfer of film from full to take-up spool. In addition, the take-up spool must not slow down as the film load increases.

3.2 The unit should be capable of transferring film in one direction only -- from a full spool to a previously empty one.

3.3 Variable film widths, from 70mm to 9 $\frac{1}{2}$ " should be accommodated. The capability of handling three 70mm or two 5" spools concurrently is needed.

3.4 The unit must have the capability of handling 500' spools (maximum weight of about 18 pounds each) without deflection of or wear to the shafts.

- 3.5 The unit must be able to be loaded easily and quickly.
- 3.6 The unit should automatically shut off after the film has been transported from the full spool to the empty one.
- 3.7 The unit shall be mounted on a portable cart with lockable casters.
- 3.8 The unit must be constructed to allow the operator to load film from a standing position.
- 3.9 The unit must be safe for use by unskilled personnel.
- 3.10 Once loaded, the unit must be capable of automatic operation.
- 3.11 The unit shall not scratch or in any way damage the film.
- 3.12 The unit must be grounded and free from all shock hazard.
- 3.13 A warning light must be provided to show when the unit is on.
- 3.14 The construction of the unit shall meet the highest commercial standards.
- 3.15 All necessary controls must be positioned to be readily accessible for the operator. In other words, human engineering factors must be thoroughly considered in the design of the unit.
- 3.16 Although this development provides for one prototype unit, that unit is intended for operational utilization and must withstand constant, daily use.
- 3.17 The contractor is to supply a film spool which can be disassembled so the film that is transferred to this spool can be removed. The distance between the flanges should be 10".